Nt.BspQI

Cat. No. : RK21300

Product Components

Components	Component Number	Concentration	1,000 U	5,000 U
Nt.BspQI	RM21701	10,000 U/mL	100 μL	500 μL
10X Buffer CutC	RM20106	10X	1.25 mL	2 × 1.25 mL

Product Description

Restriction Site

5'...G C T C T T C N▼...3'

3'...C G A G A A G N...5'

Nt.BspQI is a nicking endonuclease that cleaves only one strand of DNA on a double-stranded DNA substrate.

- This is a nicking endonuclease.
- Generates DNA molecules that are "nicked", rather than cleaved.

Unit Definition

One unit is defined as the amount of enzyme required to convert 1 μg of supercoiled pUC19 DNA to open circular form in 1 hour at 50°C in a total reaction volume of 50μL.

Storage

-20°C

Reaction Conditions

1X Buffer CutC, incubate at 50°C.

Activity at Temperature

@37°C: 80%

1X Buffer CutC

100 mM NaCl, 50 mM Tris-HCl, 10 mM $MgCl_2$,

100 μg/mL rHSA, pH 7.9 @ 25°C

Quick Cut

No

Activity in ABclonal Buffer

Buffer CutC	Buffer CutS
100%	10%

Heat Inactivation

80°C for 20 min.

Methylation Sensitivity

dam methylation	dcm methylation	CpG Methylation
not sensitive	not sensitive	not sensitive

Instructions

Recommended Protocol for Digestion

Components	50 μL
ddH_2O	Up to 50 μL
10X Buffer CutC	5 μL
DNA*	1 μg
Nt.BspQI	1 μL

*** Note: DNA substrates should be free of phenol, chloroform, ethanol, EDTA, detergents or high concentrations of salt, otherwise it will affect the enzyme activity.**

- Incubation at 50℃ for 30-60 min can completely digest the DNA substrate. Alternatively, 1 μg of DNA substrate can be completely digested using as low as 0.25 U of Nt.BspQI incubated at 50°C for 16 hr.